### **SUMMARY**

### **OF THE**

# 1999 CHEMICAL STOCKPILE EMERGENCY PREPAREDNESS PROGRAM

### **NATIONAL CONFERENCE**

June 2 - 3, 1999

**Double Tree Hotel Salt Lake City, UT** 

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#### **EXECUTIVE SUMMARY**

The 1999 Chemical Stockpile Emergency Preparedness Program (CSEPP) National Conference was held at the Double Tree Hotel in Salt Lake City, Utah, June 2 and 3, 1999. The conference included over 350 CSEP Program participants representing the U.S. Army, the Federal Emergency Management Agency (FEMA), other federal agencies, state and local governments, contractors, and other organizations involved in the program.

Plenary sessions were held at the beginning and the end of the conference, featuring state and federal officials from top executive levels of the program. The rest of the time was devoted to breakout sessions on specific program-related topics. The following 13 topics were covered in the breakout sessions:

- C Role of the American Red Cross
- C Exercises
- **C** Automation
- C Legal Issues
- C Toxicity and Risk Assessment
- **C** Training
- C Updates (Chemical Demilitarization, Automation IPT, & Capability Assessment for Readiness)
- C Role of the National Guard
- C Public Affairs
- C Collective Protection
- C Alert and Notification
- C Medical
- C Planning

Each breakout session featured either individual speakers or panel discussions, and all included time for questions and answers. Each breakout session was presented twice to give participants flexibility in their choice of topics.

This report summarizes the proceedings of the conference including both the plenary and breakout sessions.

#### ACRONYMS

AEGL acute exposure guideline level ANL Argonne National Laboratory

ARC American Red Cross

APG Aberdeen Proving Ground ASA Assistant Secretary of the Army

AYE Alternate Year Exercise

CAIRA Chemical Accident/Incident Response and Assistance

CAMDS Chemical Agent Munitions Disposal System
CAR Capabilities Assessment for Readiness

CDC Centers for Disease Control

CEO chief executive officer

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CFR Code of Federal Regulations

CHPPM Center for Health Promotion and Preventive Medicine

COTS commercial-off-the-shelf CP collective protection

CSDP Chemical Stockpile Demilitarization Program
CSEP Chemical Stockpile Emergency Preparedness

CSEPP Chemical Stockpile Emergency Preparedness Program

CWC Chemical Weapons Convention
DAC Disaster Assistance Center
DAS Deputy Assistant Secretary

DC District of Columbia

DCO Disaster Coordinating Officer

decon decontamination demil demilitarization

DOD U.S. Department of Defense DOE U.S. Department of Energy

DOT U.S. Department of Transportation

DWI Disaster Welfare Information

EAS Emergency Alert System (formerly known as Emergency Broadcast System)

EMA emergency management agency EMI Emergency Management Institute

EMIS Emergency Management Information System

EMS emergency medical service
EMT emergency medical technician
EOC emergency operations center

EPA U.S. Environmental Protection Agency EPLO Emergency Preparedness Liaison Officer

EPZ emergency planning zone

#### ACRONYMS Cont'd

ERSM Emergency Response Synchronization Matrix ESOH Environment, Safety, and Occupational Health

FCC Federal Communications Commission FEMA Federal Emergency Management Agency

FEMIS Federal Emergency Management Information System

FME Federally Managed Exercise FRP Federal Response Plan

FY fiscal year GB Nerve agent

HAZMAT hazardous materials

HCD Health Criteria DocumentHD Blister Agent (Mustard)HEPA High Efficiency Particulate Air

HQ Headquarters

HQDA Department of the Army Headquarters

HVAC heating, ventilation and cooling

IEM Innovative Emergency Management, Inc.
IPT Integrated Process (Product) Team

IRZ immediate response zone

JACADS Johnston Atoll Chemical Agent Disposal System

JIC joint information center JIS joint information system LCCE life cycle cost estimate

MEMA Maryland Emergency Management Agency

MCA Military Claims Act
MCE maximum credible event

MHZ megahertz

MOA memorandum of agreement

MOPP mission-oriented protection posture
MOU memorandum of understanding
NBC nuclear, biological and chemical
NCP National Contingency Plan

NEMA National Emergency Management Association

NFPA National Fire Protection Association

NRC National Response Center

NOAA National Oceanographic and Atmospheric Administration

NTIS National Technical Information Service

OGC Office of General Counsel O&M operations and maintenance

OMB Office of Management and Budget

#### ACRONYMS Cont'd

OREMS Oak Ridge Evacuation Modeling System

ORISE Oak Ridge Institute for Science and Education

ORNL Oak Ridge National Laboratory

OSC On-Scene Coordinator

OSHA Occupational Safety and Health Administration

PAD protective action decision

PADRE Protective Action Dosage Reduction Estimator

PAO public affairs officer

PAPR powered air-purifying respirator

PAZ protective action zone PIO public information officer

PMCD Program Manager for Chemical Demilitarization

PNNL Pacific Northwest National Laboratory

POR point of review

PPE personal protective equipment

PTE Preparedness, Training, and Exercises
QEM quantitative emergency management
RAID Rapid Assessment and Initial Detection
RCRA Resource Conservation and Recovery Act
RDA Research, Development and Acquisition
REP radiological emergency preparedness

RTAP Real-Time Analysis Platform

SAIC Science Applications International Corporation SBCCOM Soldier and Biological Chemical Command

SCBA self-contained breathing apparatus

SRF Service Response Force

TAR tone alert radio
TCP traffic control point

TOCDF Tooele Chemical Disposal Facility

TracSys Emergency Task and Response Tracking System

UL Underwriters Laboratories, Inc.

UMCD Umatilla Chemical Depot

USACHPPM U.S. Army Center for Health Promotion and Preventive Medicine

USADAC U.S. Army Defense Ammunition Center

USARCS U.S. Army Claims Service

VX Nerve Agent

WMD Weapons of Mass Destruction

Y2K year 2000

#### 1 PLENARY SESSIONS

Plenary sessions were held at the beginning and the end of the conference, featuring speakers from the top executive levels of the program. Their remarks are summarized below.

#### 1.1 OPENING PLENARY

#### Welcome by Earl Morris, Utah State Director of Comprehensive Emergency Management

Earl Morris, Utah State Director of Comprehensive Emergency Management welcomed the participants to Salt Lake City. He stated that CSEPP is a multi-faceted program and we have a lot of talent gathered here to address issues of concern. Many collateral benefits have come from the CSEP Program to increase preparedness for other threats, such as biological terrorism. Utah Comprehensive Emergency Management is currently producing a video on CSEPP and will be filming at this conference. Mr. Morris then introduced the next speaker, Doug Gore.

#### Remarks of Douglas Gore, Deputy Regional Director, FEMA Region VIII.

Mr. Gore thanked the host jurisdiction and agencies sponsoring the 1999 Conference and spoke of his involvement in CSEPP since 1988. Much has happened in the program since then. The development of partnerships among numerous agencies has been beneficial to accomplishing our goal. Mr. Gore then introduced the next speaker, Russ Salter.

## Remarks of Russell Salter, Director, FEMA Chemical, Radiological and Preparedness Division.

Mr. Salter welcomed the conference participants and expressed appreciation of the efforts of the host jurisdiction and agencies sponsoring the 1999 Conference, including especially FEMA Region VIII and Roger Sharma. This conference is valuable for highlighting the progress we have made in accomplishing our goal. Protecting public health and safety is our goal and we have been achieving it through the excellent working relationships between FEMA and the Army. A recent example of this was the Red Sky II exercise in DC where all agencies and organizations worked successfully together.

The new FEMA structure has enhanced the CSEP Program. Recent accomplishments include the efforts of the automation Integrated Process Team (IPT) and the FEMIS phase in, legal issues IPT, training manual, the Oregon monitoring study, the synchronization matrix pilot exercise, and Congressional staff meetings. Current challenges include collective protection, alert and notification, planning, public awareness, Year 2000 (Y2K), and future budgeting. This conference is beneficial because we get a chance to hear from our senior leadership and then be updated in our breakout sessions.

Mr. Salter then introduced the next speaker, Robert Walker.

#### Remarks of Robert Walker, FEMA Deputy Director

Mr. Walker welcomed the participants on behalf of the President and FEMA Director James Lee Witt. We should all be very pleased with the progress we have made. In the beginning many communities had very rudimentary emergency response capabilities. Current accomplishments include the installation of over 300 sirens and 120,000 Tone Alert Radios (TARs), the construction of 32 Emergency Operations Centers (EOCs), and installation of automation equipment enhancing all hazard response. Also, over 60 facilities are being overpressurized, personal protective equipment (PPE) has been developed and hazard prediction models have been developed.

The exercise program tested the synchronization matrix concept, and in March 1999 a new CSEPP exercise policy document was published describing the modified two-tier exercise schedule. Public affairs program improvements included new software for public affairs officials. Great strides have been made in training; currently over 23,000 people have attended the over 20 courses available.

At this conference I hope we focus on where CSEPP is going in the next century. We are beginning to see a payoff, 15 years after my initial involvement. The nation owes your community a well-managed CSEPP program to demonstrate a partnership between government and community. CSEPP will support off-post preparedness until the risk is gone. Future years hold a great financial challenge; we must be diligent in using our resources. Congratulations to all of you for making this program a success. Together we are a successful partnership and the end is in sight.

#### Remarks of Mr. Denzel Fisher, Assistant for Special Programs at the Office of the Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health

Ray Fatz sends his regrets for not being able to make the conference but he was suddenly called away to another meeting with the Assistant Secretary of the Army (ASA). The Army is making great progress in the CSEP Program. The role of Army Headquarters (HQDA) is shaping the national policy, preparing the forces and responding to the need. Additional mission requirements include policy (environmental compliance, safety and occupational health and chemical materiel), program direction oversight (program reviews, site visits, inspections and audits) and advocacy (White House, Federal Agencies, Congress, State and Local Governments, citizen groups and the Media).

The program has made remarkable progress, however challenges still remain. Current challenges include strengthening the CSEPP Team, meeting the technical challenge, meeting environmental program requirements, ensuring continued Congressional support, and meeting fiscal requirements (Kosovo is causing a drain on available resources). Challenges for the new millennium includes Chemical demilitarization and meeting the requirements of the Chemical Weapons Convention (CWC), risk communication, building public confidence, and applying the lessons of CSEPP to the domestic preparedness program.

# Remarks of Major General John C. Doesburg, US Army Soldier and Biological Chemical Command

General Doesburg briefed the participants on SBCCOM locations, mission and organizations (Research, Development and Acquisition (RDA) Enterprise, Strategy, Resourcing and Support Enterprise, and Operations Enterprise). Dr. John Ferriter is the new manager for the stockpile sites. The Operations Enterprise includes the eight storage installations, CSEPP, Domestic Preparedness, chemical and biological emergency response, treaty implementation, and other activities. We are leveraging what we have learned. Hooah!

#### Remarks of Utah Lieutenant Governor Olene S. Walker

Ms. Walker emphasized the importance of the CSEP Program in making a safer world for future generations. Your theme of moving to the future is fitting and the important part is the partnerships you are developing. Your ability to train individuals is important. Being the first incineration site, Tooele County has really stepped up in finding solutions and developing new partnerships. We are better prepared for earthquakes because of the CSEPP. Utah has been called on to receive various items that we do not necessarily wish to receive, but any contingencies that must be met have been through this program, and we have set an example for the other sites. Thanks to all of you and welcome to Utah.

# Remarks of Colonel Stephen Andraschko, Senior Military Assistant to the Office of Assistant Secretary of the Army for Installations and the Environment.

COL Andraschko discussed the benefits of CSEPP for improving preparedness for weapons of mass destruction (WMD). Consequence management for WMD includes roles for local, state and federal response. The Federal Response Plan includes the military's two Response Task Forces, which have the ability to deploy within 24 hours. Military liaisons to civilian authorities include Emergency Preparedness Liaison Officers (EPLOs), Defense Coordinating Officers (DCOs) and Joint Regional Medical Planners. Technical DOD capabilities include the Explosive Ordnance Disposal (EOD) Teams, and the Rapid Assessment and Initial Detection (RAID) and RAID Light Teams. The Nuclear, Biological and Chemical (NBC) Domestic Preparedness Training program is built on training, exercises, expert assistance and specialized assets for CB response.

#### 1.2 CLOSING PLENARY

# Opening Remarks by Mr. Russ Salter, Director of the Chemical and Radiological Preparedness Division at FEMA Headquarters.

Mr. Salter opened the Closing Plenary Session with praise for how well the conference had gone the last two days and emphasized how well he thought information had been exchanged between the participants. He gave an overview of the session which he said would consist of Bob Butrico covering some of the challenges the program faces and Denzel Fisher covering the FY 2000 budget.

#### Remarks of Mr. Bob Butrico, acting Chief of FEMA Headquarters' CSEPP Branch.

Mr. Butrico began his remarks by saying that he hoped that the conference had brought about a greater understanding of the resources that can be applied to improving all phases of emergency management, especially those related to CSEPP. He went on to acknowledge the Utah State Director and the hospitality he exhibited at the Tuesday night social event. He also acknowledged individuals who are new to CSEPP, individuals who have moved to new jobs in the program, and the Calhoun County, Alabama CSEPP Director who is retiring. Mr. Butrico then outlined future challenges that face the program and things that he hoped would be accomplished in the next year.

He stated that planning efforts needed to be a high priority and everyone should strive to update, improve, and integrate Federal, State, and local plans, and institute a cyclic improvement process for them. He stated that exercise results needed to be better used in improving and revising the plans. He also stated that the onus of maintaining and updating plans that were built by contractors must be borne by the CSEPP planning staffs. Finally, he encouraged planners to take advantage of existing planning tools.

He urged a redoubling of efforts in the public awareness and education campaign to increase protective action awareness, improve the public's perception of CSEPP, and increase their understanding of risk reduction through stockpile destruction.

In the area of alert and notification, he said the challenge is to expedite procurement and installation of Tone Alert Radios and resolve the litigation issues as soon as possible.

He stated that significant progress must be made in the Automation arena. A critical milestone for the incorporation of user requirements into a single information system is the December 1<sup>st</sup> Federal Emergency Management Information System installation at all locations. To achieve this milestone, he solicited help from the State and locals to obtain the needed current software licenses.

Mr. Butrico encourage all to be aware of CSEPP's applicability to the Domestic Preparedness Program and the synergy that can exist with the Weapons of Mass Destruction programs.

In the area of sheltering, he stated that risk-based analysis must be used to verify the efficacy of overpressurization, versus enhanced or expedient sheltering. He also cautioned jurisdictions about starting collective protection projects that cannot be completed before the threat is removed.

He said that in a time of doing more with less, he would appreciate the audience's patience with his current manning situation that is causing absence and lack of direct involvement of FEMA HQ in site IPTs. Fixes are being worked for the problem. He also related that the current Army - FEMA partnership, which is probably the best working relationship they've had, can still get better and that he is personally committed to it.

Mr. Butrico stated that they are having a hard time convincing congressional appropriations committees that we need more money when so much remains in prior year funds. He stressed the importance of States closing out their prior year budgets.

Mr. Butrico closed by saying that we are approaching the ultimate in protective measures for the communities from a chemical stockpile threat, namely, the destruction of the chemical weapons. He said he and his staff are committed to supporting the destruction effort, and he believes that rapid destruction of the stockpile equals maximum protection. He challenged the audience to meet the future challenges the program faces with their best efforts and work as a team.

#### Remarks of Mr. Denzel Fisher, Assistant for Special Programs at the Office of the Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health

Mr. Fisher began his presentation by expressing his appreciation for the work that the Army Project Manager for CSEPP at SBCCOM has done for the program.

He then went on to discuss the FY 2000 budget. He showed a slide that listed the total CSEPP funding request to Congress for FY 2000 and the amount that is currently in the Army's Program Objective Memorandum for FY 2001. He explained how the program was able to increase the original FY 2000 Life Cycle Cost Estimate (LCCE) to cover projected collective protection requirements that had not been anticipated in the 1996 LCCE. He emphasized that this plus up was an anomaly for the program and the program was facing continued reductions from the original 1996 LCCE amounts. He stated that most of these reductions are the result of a decrease in the inflation figures being used by the Office of Management and Budget. He also stated that the ratio of CSEPP funding to total Chemical Demilitarization Program funding has decreased from 12% at the beginning of the program to a current 8%.

Mr. Fisher related how the Chemical Demilitarization Program has come under a lot of scrutiny from Congress and the program is facing the threat of funding reductions in FY 2000 similar to the reductions that Congress imposed on the program in FY 1999. To date, one of the three Congressional committees that oversee funding for the Chemical Demilitarization program has made significant reductions without prejudice to the Chemical Demilitarization Program FY 2000 budget request.

Normally when congressional cuts are made without prejudice, CSEPP takes a prorated share of the reductions. He stated that Army and FEMA CSEPP managers have spent a considerable amount of time defending CSEPP funding because of low obligation and expenditure rates. They have been educating the Army leadership and Congressional staffs about the grants management process and why funding administered through the grants management process does not get obligated and expended as fast as funding administered through the Army financial system. Mr. Fisher explained that the job of defending CSEPP funding is much easier if they have examples of CSEPP successes and evidence of program progress.

To speed up the transfer of appropriated funding to FEMA, he stated that the Army has submitted proposed legislation that would have Defense funding transferred directly to FEMA, thus avoiding the Department of Defense and Army processing delays that have been encountered in the past. So far, there have been no objections expressed to the proposal.

#### **Closing Remarks of Mr. Russ Salter**

Russ Salter started the final portion of the session by recognizing Mr. Don Miller, communications officer from the State of Washington, with a FEMA certificate and letter of appreciation for outstanding work done on the State of Washington CSEPP communications and alert and notification systems.

He announced that the State Directors had discussed future CSEPP national conferences at their breakfast meeting and concluded that the national conferences are still useful. They also discussed some possible format changes for next year's national conference which will he held in Little Rock, Arkansas in latter July 2000. He will begin working with the State Directors on the agenda for next year's conference when they meet next month. He encouraged all participants to provide any suggestions they may have for conference improvement.

He gave credit to all of those who were involved in the planning and execution of the conference for a very successful conference. He then adjourned the conference.

#### 2 BREAKOUT SESSIONS

A total of 26 breakout sessions were held on June 2 and 3, covering 13 topics (two sessions were held on each topic). Following are summaries of the presentations and discussion in the breakout sessions. For the convenience of the reader, the two sessions on each topic have been combined into one summary. The topics are arranged in the order that they were scheduled during the Conference. For each session, this summary identifies the session facilitator and speakers, and summarizes the presentations that were made. Where there were questions from the audience, the questions and answers are summarized also.

#### 2.1 ROLE OF THE AMERICAN RED CROSS

Facilitator: Reta Oliver-Muller, FEMA Region VI

#### **Summary of Presentations:**

Cherri Almond, American Red Cross (ARC) Disaster Response Planner, FEMA Region VIII Coordinator, introduced the session presenters and how their talks would define the role of ARC in CSEPP. Her presentation gave an overview of the ARC role and responsibilities, providing a summary of its mission, authority and legal status, disaster program areas (disaster planning, community disaster education, disaster response, mitigation, and the prompt relief to victims of major disasters), and their volunteer base - a key resource. All ARC volunteers are thoroughly trained in responding to local and national disasters.

Ed Ruttan, ARC, Disaster Planner, CSEPP, in Oregon emphasized the practice of involving other volunteer organizations in disaster response. Meeting with the organizations on a personal basis is important to building a partnership. The ARC in Oregon is including other organizations in CSEPP exercises. CSEPP helps build a better total capability of volunteer organizations to deal with any type of disaster. The bottom line is to have the local ARC chapter work to get other volunteer organizations involved and recognize them for their support.

Marilyn Candelaria, Assistant Director, Tooele County Emergency Management Agency, shared a success story of how Tooele County has worked with the ARC in solving its mass sheltering needs if there is an evacuation. They rely on the Greater Salt Lake Area Chapter of the ARC.

Tooele County plans to evacuate people before plume movement occurs as a way of minimizing the possibility of exposure. They would open reception centers in local buildings using county volunteers. Evacuees would then arrive before any screening would be required. When the plume is projected to leave the depot boundary then traffic would be stopped and evacuees screened as a way of dealing with people who may or may not be exposed when they arrive at reception centers. The green "wristband" process of identifying individuals who do not show signs and symptoms was explained as a way to help the reception center be better prepared to respond. The role of the ARC in operation of

the centers was presented. The need to have a trained group of volunteers to operate centers was stressed. Further, it was explained that Emergency Medical Technicians (EMT)s have been trained on signs and symptoms of exposure to chemical agents. The process of activating and specific roles of the ARC was discussed. The ARC can take over a reception center and convert it into a shelter if a shelter is needed. Exercises have been critical to defining roles and responsibilities. Plans have evolved through discussions and exercises to maximize the efficiency and effectiveness of fulfilling this critical human need.

Jerrianne Kolby, Director of Emergency Services for the Greater Salt Lake ARC provided a description of the evacuee support system. She described an evacuee's journey from the incident, to the screening, to the reception center and then a decision on whether to go to private lodging or a mass care facility. The ARC will send a representative to the Tooele EOC, as well as the Joint Information Center (JIC). The representative tracks the Protective Action Decision (PAD), acquires information on numbers of people involved, and determines the shelter size. However, they must be flexible and be prepared to expand or contract services, relocate or add new shelters. The Red Cross will provide mental health crisis counseling, have first aid available via a nurse, get food to the people and the workers, coordinate with other agencies, and put out disaster welfare information.

Elaine Clyburne, ARC Disaster Response Planner, provided an overview of how the ARC provides general information on the welfare of persons residing in the disaster affected area. This information lets the public in the area, state, and nation know the particulars and keeps down rumors and erroneous information being put out in the press. ARC serves as the medium of communication between inquiring family members and their next of kin in a disaster situation. ARC establishes a Disaster Welfare Information (DWI) process to assist in family reunification, puts out agreed upon media messages, and protects the confidentiality of those who have sought shelter. Verification is needed on the presence of people, their locations, and the wording used to describe a person's status.

Q: In shelters will there be a Public Information Officer (PIO)? How is information managed at a shelter?

A: The shelter manager is trained in media and information response. Confidentiality is taught as a key element. An ARC public affairs person is in the JIC. When media is present, there is special care taken.

Q: Does ARC do any decon training?

A: ARC does not do decon, but some of the nurses are trained to recognize exposure symptoms. It is critical to have a reception center to do the screening. People have to understand the risk at the time of the emergency, the vapor puts out a very low possibility of a secondary effect.

Q: At Galena, people went to the shelters for an antidote, even though there was no release.

A: At Tooele reception centers there are no antidotes to be handed out. At Umatilla, the people are asked where they came from to be able separate people who might have some contamination. In the whole emergency care system, skilled professional people have to identify and screen people along the route.

Q: Where does the ARC get information about DWI?

A: Information comes for ARC representative at the EOC.

Q: Explain the kind and method of passing information to the public by the ARC?

A: All information except personal information is passed through the JIC.

Q: How do you overcome the hesitancy of some ARC people to give out information?

A: By training people about their responsibilities and that it is important for the ARC to put out the information.

Q: Are you in contact with hospitals on status of people?

A: Health services people at hospitals have that information and do that.

Q: Do messages go out through the JIC?

A: Yes

Q: Is a local number available to contact the ARC to get information?

A: Yes, there is an 800 number. It depends on the state.

Q: What about identifying screening locations before sending people to shelters?

A: In UT they use evacuation before the need for screening becomes necessary. After an off-post release, all people coming from the area would be screened.

Q: How do shelter people know evacuees are ok to enter the shelter?

A: Green wristbands help identify "clean" people determined either by screening or if they were not in an area where they could be exposed to agent. This practice helps hospital personnel as well as the registration people at shelters.

#### 2.2 EXERCISES

**Facilitator:** Ron Barker, FEMA HQ

**Summary of Presentation 1:** Mr. Lorin Larsen of the State of Utah summarized exercise innovations that will be "piloted" this year in the Deseret Community 1999 Exercise. He stated that "Exercises, like the drunk's lamppost, can be used for support, or for illumination." The Exercise IPT has recommended that three evaluation tools be developed:

1: Community Profile. This portion of the concept provides an overview of Community's status, a review of the status compared against the CSEPP Benchmarks plus a capability review based on CSEPP objectives. Mr Larsen indicated that the IPT was aware of the need for development of objective community profile rating criteria for this area. In addition this concept includes an annual exercise recap, completed by the jurisdiction, consisting of an overview of four exercise years or two Federally Managed Exercises (FMEs).

It was reinforced by the IPT members present that this is not intended to be, nor should it be, used as a budget justification tool. That could backfire in the face of the jurisdiction.

- 2: Customized Evaluation Criteria. This portion of the concept consists of development of enhanced evaluation criteria, a logical extension of the extent of play agreement, incorporating the format of the existing CSEPP objectives. One example was provided as an overhead slide.
- 3: Integrated or Performance-Based Evaluation. The primary focus of this portion of the concept is that the program retains the CSEPP Objectives, albeit in a different format, with a concentration on performance measurements and the response operating systems from the Synchronization Matrix process. This concept is intended to improve exercise evaluation and document the integrated response, as real response is also integrated. Within the performance-based evaluation concept the program can focus on overall performance <u>vs</u> fragmented performance.

Mr. Larsen provided two handouts showing how the IPT was able to cross reference the objectives and response operating systems (from the Synchronization Matrix).

Utah will conduct three pilot demonstrations in September 99. The results will be provided to the National CSEPP Community. Input and recommendations will be solicited. Selection and adoption of recommendations will be made.

The expectations are: better exercises for all participants; better response capability and readiness information; and an evaluation process which is not so narrowly focused.

Q: How would integrated evaluation change the process?

A: It will require more of an evaluator's time to ensure information integration, and a better trained cadre of evaluators.

Q: After an actual incident, an after action analysis is conducted. Is this meant to replicate that type of analysis conducted before an exercise?

A: The tool is intended to provide information relevant to the evaluation process.

Q: When will the Community Exercise Profile lose the "draft" label?

A: The IPT will meet in November to review the results of the September Exercise and make recommendations to FEMA and Army management. A decision is expected around CY 2000.

**Summary of Presentation 2:** Mr. Ron Barker of FEMA HQ described the changes in CSEPP exercise policy incorporated in the new "Blue Book" dated March 19, 1999. He described the Federally Managed Exercise (FME) and Alternate Year Exercise (AYE) concept. The standard exercise objectives remain the same, but there is new guidance on extent of play agreements.

The FME is an assessment of a community's capability to respond. Driven by a scenario. The Codirectors remain the same as in the past. The exercise is driven by the extent of play agreement, the scenario, and related events. The extent of play may be more explicit on what the community will do during the exercise. Each jurisdiction's extent of play will reflect their involvement in the exercise scenario. CSEPP credit can be given for other demonstrations.

There is increased interest in playing real weather. The use of "real weather" presents a number of challenges to exercise designers and players. It requires flexibility on the part of the community, since the real weather may not drive play of all planned objectives for all jurisdictions. It may require out of sequence play or "write-in" demonstrations to ensure that decontamination, shelters, etc., are covered.

The AYE is a major change from the past. All CSEPP jurisdictions will participate in the AYE. An AYE may be used by the community to: train, evaluate response plans and procedures, validate corrections to outstanding findings, and/or address other issues. The Army installations must exercise "full up" every year. Scheduling must accommodate the Army's Initial Response Force Exercise cycle. The Off-Post co-chair may be different between the FME and the AYE. The FEMA Region representative is responsible for consolidating contractor support needs. The AYE gives the community a chance to do something new and tailor the exercise to their needs. CSEPP Exercises are on a biennial cycle alternating years for FMEs and AYEs. A community may choose to have FMEs in lieu of AYEs.

All FMEs will be evaluated. Standard Objectives will be used for planning and evaluation. The community will demonstrate all applicable objectives. Each jurisdiction will demonstrate, for evaluation, all actions (objectives) in order to support the scenario. The exercise co-chairs will be from FEMA and the Army.

The AYE will offer greater flexibility to the off-post jurisdictions. The community may use the CSEPP objectives or may develop and use their own objectives. The installation response activities will be evaluated during every AYE. The off-post jurisdictions may tailor the objectives to their needs.

Each exercise will have an exercise report. The reporting formats and time constraints are the same for AYEs and FMEs. The exercise co-chairs are responsible for the exercise reports.

Extent of play agreements should contain the following:

- 1. Purpose
- 2. Standards and References
- 3. Special exercise parameters
- 4. JIC/JIS
- 5. Exercise participants
- 6. Evaluation of objectives
- 7. Exercise plan
- 8. Concurrences
- 9. Signatures of the appropriate jurisdictions.

The exercise document is on the APG web page.

Q: How will the demonstration of all applicable objectives affect the extent-of-play agreements? A: It will make the community actually demonstrate all applicable objectives, not just the ones they want to do.

**Summary of Presentation 3:** Mr. Joe Bell of the State of Indiana described the Newport community's approach to conducting an AYE. Mr. Bell titled his presentation, "AYE 99: The Newport Community Way."

Mr. Bell provided the AYE "mission statement", described the goals, discussed the meetings that were held, and described how the community held a workshop on CSEPP Planning Guidance. The workshop was attended by chief executive officers (CEOs), Emergency Services, Installation, Human Services, and PIOs.

Mr. Bell described the issues they faced in getting people to think "outside of the box", except for the State of Illinois. They "threw the box away" and are providing their own controllers and evaluators for the exercise. Mr. Bell felt there was a need for Co-Director Training.

The community will prepare the Post-Exercise Report (Tab C). They will use "Remarks" to replace strengths, observations and findings (which can be neutral without being construed as negative/positive). The Newport Community sees exercising as a training event and will conduct this AYE as such.

#### 2.3 AUTOMATION

Facilitator: Darius Kwiedorowicz, SBCCOM

Summary of Presentation 1: Frank Belcastro, SBCCOM, U.S. Army Installation and Infrastructure Year 2000 Program. Mr. Belcastro briefed the big picture of the Army's five phase Y2K implementation plan. He discussed the five phases and all the categories of items the Army was looking at, how the plan was being implemented, reporting and status checks, and how items that would not be fixed would be dealt with. He gave the current status of Y2K compliance at the eight CSEPP installations. There are still a few issues at all sites except Edgewood. Each installation is to do a simultaneous compliance test of all systems by 30 June. Three installations, Umatilla, Pueblo, and Newport have done spot checks already.

Mr. Belcastro when on to explain that each post or site commander had personnel certify that all equipment and software under his/her command was in fact Y2K complaint inspected. Then it was required that the commander sign off that the equipment was in fact Y2K compliant. He further stated that over 230 vendors who first stated that their product was Y2K compliant have in fact recanted that and were now working on making their product comply.

He also stated that he or some one from his office would be visiting every CSEPP site to check the computers and other equipment at those sites for Y2K compliance.

Q: Are their any joint on-off post compliance tests planned for the CSEPP systems?

A: That comes under Darius' area. He will address it.

Summary of Presentation 2: Darius Kwiedorowicz, SBCCOM; CSEPP Automation Systems, EMIS and FEMIS. Mr. Kwiedorowicz explained that all the necessary checks were completed on EMIS and FEMIS to insure that they were Y2K compliant. He also explained that EMIS 3.1 had a "weather" deamon patch applied that made it compliant. Each installation is due to complete compliancy certification of CSEPP systems between August and November 1999. Mr. Kwiedorowicz explained how compliance checking was accomplished. He also discussed Y2K compliance of commercial off-the-shelf (COTS) software used in CSEPP. Off-post infrastructure is not certified in the process. Also, COTS E-mail packages are not included in the certification. A Julian date conversion issue in the HANDAR system was missed in testing. A problem also was detected in Julian date conversion in the demil towers. Both problems have been fixed in EMIS. One thing learned in testing, it is easy to set servers forward in time, but they do not like going backwards in time. Beware of this in your testing.

Q: When the new version of FEMIS is released this summer will it have to be tested and recertified?

A: No. The contractor is required to deliver it compliant. We may do some spot checks.

Q: You said you didn't do any testing of routers.

A: Routers were included in infrastructure. These items are supposed to be compliant.

**Summary of Presentation 3:** Dennis Atwood, FEMA HQ; Contingency and Consequence Management Planning. Mr. Atwood explained what FEMA and local emergency management offices could do to alert the public to be ready for some Y2K problems. He went on to explain that FEMA had produced a publication called "Contingency and Consequence Management Planning for year 2000 Conversion", to be used by all emergency response agencies to make them Y2K compliant. FEMA Director Witt has made Y2K compliance a priority and the agency was in fact 100% compliant in all its mission critical systems as of March 1999.

FEMA is conducting and aggressive outreach program to include workshops on the Y2K issue. Y2K can be approached like any other emergency management issue. No nationwide Y2K infrastructure problems are anticipated at this time, but numerous local problems are to be expected. Each locality should think about doing a Y2K annex to their Emergency Operations Plan. Assess your threat and estimate the likelihood. Assess the potential impact on public safety and health, property loss, business impact, etc. Develop a plan to work around resource shortfall. Begin in your own emergency management agency. Make sure it is Y2K compliant and does not become part of the problem. As you plan you need to get involved with local groups. Identify community and backup resources. Interdepartmental coordination is critical. When it is all done, train in and exercise the plan before the year 2000 is upon us. Communicate your effort to the public to reassure them. If after all this is done, and you still have a Y2K crisis, the Federal Response Plan is the mechanism to get assistance, as in any other type of disaster.

Mr. Atwood listed FEMA's Y2K planning assumptions and policies. He explained the similarities and differences in responding to this situation versus other types of emergencies.

#### 2.4 LEGAL ISSUES

Facilitator: Elaine Chan, FEMA HQ Office of General Counsel

#### **Summary of Presentations:**

Elaine Chan introduced the session, the members of the panel, and the CSEPP Memorandum of Agreement and Memorandum of Understanding (MOA/MOU) Guide. Copies of the Guide were available at the session. She then turned the floor over to Ruth Flanders, Soldier and Biological Chemical Command Environmental Law Team Attorney, who presented the history of the Legal Issues

Working Group. The group has a mix of attorneys and emergency managers and includes SBCCOM, chemical installation, FEMA, and state and county personnel. The group has worked to coordinate legal workshops for several years. There was a recognized need for better MOAs, MOUs, etc. in the program. The resulting guidance focuses on CSEPP, but may also be applicable to other hazards.

Ms. Chan then introduced Karen Cleveland, Senior Policy Advisor, FEMA Chemical, Radiological and Preparedness Division, to discuss how the Guide can be used. Ms. Cleveland pointed out that it can be both a template and a set of review criteria. The sample agreements it contains are not designed to supplant state and local planning. Instead, they identify ways that MOAs can improve or supplement planning that is already in place.

The next speaker was David Holm, CSEP Program Manager, Colorado Office of Emergency Management. Mr. Holm observed that any agreements between state governments are required to have at least tacit Congressional approval. Two agreements already exist for almost all emergency management jurisdictions -- the 1950 Civil Defense Compact and the Emergency Management Assistance Compact (signed by 27 states). However, no mutual aid agreement among states exists for CSEPP. It was agreed yesterday in the State Emergency Management Agency Directors' Meeting to draft a supplemental agreement under the 1950 Compact to provide for CSEPP mutual aid assistance. The draft will be reviewed at the State Directors' meeting in July 1999.

Mr. Holm also remarked that it would pay big dividends for CSEPP planners to establish a close working relationship with their jurisdiction's legal advisor, so that when their advice and assistance is sought on MOAs and MOUs they would be supportive. This working relationship could be fostered by CSEPP planners keeping legal advisors informed about CSEPP legal issues, such as giving them copies of the MOA/MOU Guide distributed at this session.

Mary Beth Vasco, Energy and Environmental Programs Attorney at Argonne National Laboratory (ANL), then provided an overview of the process by which the Guide was developed. The need arose from the fact that CSEPP guidance emphasizes the use of MOAs/MOUs, but provides no guidance on their content or form. A team was assembled from a core group of attorneys that has worked on other legal issues raised by CSEPP. Technical experts were added because it was recognized that many of the subjects of MOAs/MOUs require technical sophistication to understand. Considerable technical and legal research was done. A workshop on MOAs/MOUs will be held during Summer 1999 at ANL.

Ken Lerner of ANL presented an overview of the Guide. The purpose of the Guide is to enhance preparedness. Any negotiation over the terms of particular agreements needs to keep this perspective. Developed specifically for CSEPP, the Guide can be applied to other hazards. It does not establish new policy; rather, it applies existing guidance, regulations, etc. The Guide focuses on agreements between installations and off-post communities, but also covers agreements between other parties involved in CSEPP.

The Guide includes two sections. Section 1 presents general guidance applicable to all agreements. Section 2 presents specific guidance and example agreements on 9 CSEPP-related topics. Agreements help coordinate planning and can save precious time during a response. Agreements also can help secure specialized resources. Accomplishment of a large variety of emergency response functions can be facilitated by agreements; these functions are spelled starting on page 4 of the Guide.

The Guide explains the differences between various types of agreements. For example, an MOU is a mutual agreement, whereas an MOA is for situations where one organization supports another. These differences can be important where applicable regulations specify a particular type of agreement.

The sections most commonly included in all agreements are a purpose statement, references and authorities, definitions, logistical considerations, and legal and financial considerations. The purpose statement assists in interpreting other parts of the agreement. Term definitions are sometimes needed to explain words with specialized meanings; for example, the term "emergency" can have many meanings. K. Cleveland added that it is very desirable to use terms consistently with their ordinary usage because to do otherwise may cause confusion during the press of an emergency. Logistical considerations may include promises by the parties to an agreement to cooperate with each other, such as mutual commitments to exercise emergency plans. Legal considerations may include liability waivers. The limitations imposed by the Anti-Deficiency Act and the Posse Comitatus Act restrict the terms that federal personnel can agree to — the Anti-Deficiency Act, for example, criminalizes certain contracting actions involving federal funds expenditures and is a significant limit on Army emergency planners and responders. Annual review and update of agreements is recommended.

The second section of the Guide is a collection of nine sample agreements. For each topic, excerpts from applicable requirements and guidance are presented, points to consider are raised, and an example agreement with notes is provided. Most of the agreements are based on real agreements that were collected from CSEPP sites. Some were significantly modified or were developed from scratch. The sheltering agreement is a standard American Red Cross document.

The agreements are examples, not templates or models. It is important that those developing agreements seek specific legal advice. R. Flanders noted that she is responsible for assisting Army installations without their own legal counsel. Mary Beth Vasco said that consideration should be given to involving local PAOs and PIOs in the negotiating of agreements, since they might well eventually have to explain these to the media and the public.

A comment form is provided in the Guide for input now or in the future in order to facilitate updates.

Q: If the working group gives advice in response to a query, how will this information be shared with other jurisdictions that could benefit from this advice?

A: The working group will distribute this information through programmatic channels if it has application outside of the jurisdiction that made the query.

Q: How long will this working group remain intact?

A: The working group will remain intact at least through the conduct of the proposed workshop. The future of the working group after the workshop has not yet been determined.

Q: The MOA/MOU Guide does not seem to address agreements between or among states.

A: Pages 6 and 7 of the guide mentions this issue. This subject can be developed more fully at the workshop. Guidance can also be developed if state directors are interested. Dave Holm will draft a supplemental agreement for consideration at the next state directors meeting.

Q: Will the workshop in August focus on internal Army agreements, or Army/local jurisdiction agreements?

A: The workshop will be CSEPP specific, but will be broad ranging with regard to parties to agreements. The workshop agenda is not yet defined, so there is time to influence the scope of the workshop. Your input at this session is very valuable in this regard.

Q: The guide appears to advise against the use of off-post fire fighters for on-post response to a chemical accident. See top of page 36.

A: This is Army policy.

Q: Do you have guidance on grants management? Can other information be provided off-line?

A: This is not addressed in the Guide in the interest of brevity.

Q: How often should MOAs/ MOUs be reviewed?

A: Most have an annual review requirement. M. B. Vasco added that Army budget guidance requires periodic review. At Deseret, the Army developed a one-page summary presenting review dates for all agreements in order to ease tracking of this requirement. K. Cleveland added that changes in circumstances may also trigger a need to change agreement.

Q: We recently formulated a joint information agreement. Why would a periodic review be needed?

A: This does not need to be an extensive legal review. Staff may be unaware of the agreement and may learn about it during the review.

Q: Did hazardous waste disposal come up as an agreement topic? We are trying to work with our Army depot to identify responsibilities for disposing of hazardous waste from decontamination.

A: No. Such an agreement would need to take account of the extensive regulations already applicable. Because this area is so highly regulated, there may be no need for an agreement. Dave Holm added that the most valuable aspect of these agreements is the consensus-building process that occurs while they are being developed -- the negotiation process involves those who will need to know about their terms in case of an emergency. It is important not to wait to negotiate an MOA/MOU until its implementation is needed; by giving the Guide to your legal counsel now, planners can use this as an opportunity to get acquainted and help the lawyers do their job.

Q: What if one party decides to pull out of an agreement and does not advise another party? What if a party refuses to comply with an agreement because the cognizant staff person is unaware of it?

A: Usually, agreements provide for their own termination; where termination clauses exist, they must be followed. Most agreements are enforceable as contracts. An authorized signature binds the organization, even if a particular individual may be unaware of the agreement's existence. However, suing for enforcement would probably spoil the cooperative relationship the agreement was intended to memorialize. This is a very good reason to provide for periodic review. Many jurisdictions make agreements annexes to emergency plans in order to make staff aware of their existence and terms.

Q: Will copies of the Guide be sent to all CSEPP participants?

A: The Legal Issues Working Group will conduct a two-day workshop to review the Guide and related guidance and topics. It will present examples of well-written agreements, technical information, and factors to consider during negotiations. The reasons for the workshop is to gather comments on the Guide, to exchange information, to assess current agreements, and to provide site-specific assistance within time limits. The workshop is appropriate for emergency managers, attorneys, Army installations, and states and counties. The number of attendees will be limited. It is planned for August 24-25, 1999 at ANL. Additional copies of the Guide can be obtained from K. Lerner of ANL.

Q: On p. 55, the points to consider for a JIC agreement suggests staff augmentation, but the sample MOU does not include such a provision. Are you aware of any such examples.?

A: Usually, this subject is covered standard operating procedures. E. Chan will look for an example of a staff augmentation clause and provide it. A member of the audience pointed out that the Pine Bluff JIC agreement contains a staff augmentation clause.

Q: Will all local organizations be invited to the August 1999 workshop at ANL?

A: We cannot allow the workshop to be overwhelmed by sheer numbers. We would like to invite state and local attorneys in particular if we are provided with the names and addresses of appropriate persons. The workshop will emphasize "training the trainer."

Q: Will the workshop invitation letter make clear that the audience includes planners as well as attorneys?

A: Yes. It would be helpful for those who attend to bring all existing agreements, even in other (non-CSEPP) areas. K. Cleveland suggested making the workshop a topic at an upcoming site-specific IPT meeting and that IPT members be encouraged to provide copies of existing agreements to whomever from that site will attend the workshop.

Q: How many workshop attendees are anticipated? Would you sanction a site-level spinoff workshop?

A: The workshop planning base includes a planner and an attorney from each state and one local government from each state, plus personnel from Army installations, FEMA regions, and Army and FEMA HQ -- about 80 people total. Site-level sessions are not currently budgeted. It is hoped that the "train the trainer" approach will be sufficient.

#### 2.5 TOXICITY AND RISK ASSESSMENT

**Facilitator:** Mike Myirski, SBCCOM

**Summary of Presentation 1:** John Sorensen, Oak Ridge National Laboratory (ORNL); Toxicity Concepts and CSEPP.

Mr. Sorenson discussed the basic concepts underlying CSEPP planning. One of the three critical factors (time, distance and wind speed) effecting decisions, time is the critical one to permit implementing protective actions. The current approach is conservative and was used to set the boundaries for the Immediate Response Zone (IRZ) and Protective Action Zone (PAZ). The boundaries set for the IRZ permit response in less than one hour and the boundaries set for the PAZ are based on response actions of at least 2.5 hours.

ORNL was asked to do an independent review of how toxicity is being used in CSEPP planning. The study showed that there are a variety of values used. Some are unique to CSEPP, others are common to other programs. Toxicity values determine how protective actions decisions are made, use of personal protective equipment (PPE), when an area is safe for reentry, and, finally, to help estimate resource needs. They also lead to other indirect effects on policy decisions. ORNL has a report which is in final review and will be available on the web site soon. The ORNL recommendations are to

continue using the values in place until better numbers become available, and to develop values designed for use in emergency response programs. He concluded his comments by stress the need to develop risk communications program.

**Summary of Presentation 2:** Veronique Hauschild, U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM), Chemical Agent Toxicity and Health Standards Update.

Ms. Hauschild discussed the current Army goals in addressing toxicity standards for: the general population, occupational populations, deployed soldiers, and the environment. She stated that CHPPM will continue to evaluate and modify health standards with regard to advances in science and changing needs. She cited standards for drinking water and how they apply for demil as an example of their efforts. A list of the many Army organization involved in the process was presented. Other organization outside the Army providing helping include: the National Response Center (NRC), Centers for Disease Control (CDC), U.S. Department of Energy (DOE), U.S. Department of Defense (DOD), and the U.S. Environmental Protection Agency (EPA). She listed the on-going efforts designed to address specific areas: soldier force protection; clean up levels; worker and general population safety, and management of hazardous waste.

A chart showing the time frames associated with each initiative starting from 1995 through 2000 was shown followed by an update on each of the associated nine reports: (1) the Reutter/Wade report (to validate estimates for soldiers in battlefield conditions) was completed in 1994 and reviewed. (2) The NRC Report on Reutter/Wade was completed in 1997 and included some recommendations including the need to convene an expert panel for further study to determine final values. These reports are not expected to result in significant changes to emergency planning operations. (3) A project was initiated to develop acute exposure guideline levels (AEGLs) for community emergency planning to upgrade existing values in modeling. She described the three levels of severity of AEGLs that would include concentrations over different time periods.

Other initiatives discussed include Health Criteria Documents (HCDs) to validate existing air guidelines. The final values will be incorporated into Army regulations and guides. The HCD on G-agents was completed in 1998; HCDs on VX and HD are not yet final. (4, 5 & 6)

(7) The Oral Reference Dose Report is a multi-media toxicity estimate used for calculating safe lifetime exposures. It follows EPA methods that have numerous safety factors built into the values. It is currently under NRC review. (8) A Health-Based Environmental Screening Level Report describes soil screening values for general population, industrial, as well as residential scenarios. It is also based on EPA methods. It will provide criteria for CSEPP Reentry-Recovery decisions. Finally, (9) the Chemical Agent Rule Land Disposal Restrictions initiative will establish land disposal rules and waste management criteria for chemical agents and associated wastes in Utah. It will be offered to the other states.

Q: Does dosage in D2PC need to be adjusted?

A: The numbers will be lowered.

Q: If the values is lowered, how can you say that there will be no changes is planning?

A: New information will be time specific. It will be evaluated over time. It is expected to be a very conservative estimate.

Q: When will D2PC adjustments be ready?

A: In early 2000 once Army review is completed. However, the technical report will be available while the information is reviewed by the Army policy makers.

Q: How does the new information compare to that released earlier this year in the Off-Post Monitoring report.

A: They do not equate, but the Off-Post Monitoring Report levels are the current use values until new reports officially change them.

Q: Do changes in toxicity values impact the demil schedule, since they may limit the available days that operations could be conducted?

A: No, there should be no impact on demil plant operations, but they could affect movement of munitions to plant. Just have to design the process so that this does not become the rate limiting step.

Q: What is the time line for release of the various reports?

A: Cannot give a specific time line at this time.

**Summary of Presentation 3:** Michael Myirski, SBCCOM, Toxicity Standards for Chemical Warfare Agent: Potential Impact to CSEPP Planning.

Mr. Myirski discussed the impact of toxicity standards to CSEPP Planning. He reviewed planning for individuals accidents in terms of hazard modeling. The review concluded that a change in toxicity is equal to a change in source strength. And that any "new" plume that could be hypothesized due to changes in toxicity matches an "old" plume already in the planning base.

He explained the relationship of exposure time to the effects on the human body. High concentrations over short time have a greater effect that exposure over longer time periods. Based on new information all existing standards will be lowered. He pointed out that at longer plume distance or longer release

scenarios, the estimates may be more conservative. The model is conservative over all distances but is more conservative over greater distances.

A list of the CSEPP Programmatic Areas that would and would not be potentially affected was discussed. Functional areas potentially impacted include: special facilities/collective protection, medical supplies, planning for individual accidents, and risk based decisions. Protective action decision making, PPE, and many other functional areas should remain unaffected. A discussion developed about the possible impact of lowering the toxicity levels on the protective actions decision process.

The establishing of an emergency planning zone (EPZ) around Aberdeen Maryland was used to illustrate the impact on risk-based decisions. The reduced emergency planning zone was a result of the change in risk. It was suggested that the biggest impact will be on-post, possibly delaying demil operations. It was mentioned that the Alabama IPT is considering accepting the risk based decision process to decide if any change are needed. The summary comments concluded that:

(1) existing standards should remain in place while revised toxicity standards are being developed; (2) existing plans with current standards provide conservative estimates of the hazard/risk; and (3) no significant changes to planning or response actions should be required.

Q: Doesn't the threat affect additional facilities since the new lower toxicity value will reach out to further facilities?

A: The plume will arrive at the same time and concentration. The overall exposure over time will not change. Planning for a composite of current scenarios with current values will provide adequate and conservative plans. Current plans to take protective actions for an entire zone also account for changes in toxicity.

Q: How are igloos decontaminated when leakers are found?

A: When a leaker is found, the igloo is filtered until it is safe to enter the igloo and containerize the round. The igloo is filtered and monitored until three consecutive days of negative reading are obtained.

Q: Don't we have to be concerned that release of this information may change public perception and trust in the program?

A: Yes a sound risk communication strategy and program must be developed.

Q: We occasionally go beyond the limits of D2PC, i.e. greater than 50 km. Won't that happen more often with the new values?

A: No, the built in conservative parameters in the model should prevent that.

#### 2.6 TRAINING

Facilitator: Robert Norville, FEMA HQ

**Summary of Presentation 1:** Robert Norville discussed the 20 CSEPP courses now available. In 1991 there were only Army courses. Now there are several Emergency Worker courses, Public Affairs/JIC courses, as well as Medical Dispatchers training. There is a refresher video for emergency workers. An Emergency Planners companion series has been developed; the Protective Action portion will be out in July '99 and the Emergency Support Operations a bit later. The JIC Advisor computer-based training course is now on CD-ROM thanks to the Oak Ridge Institute for Science and Education (ORISE).

Kay Ingle briefly described the training courses offered by her group that are available to CSEPP participants.

**Summary of Presentation 2:** Jim Young, formerly an Army Exercise Co-Director, now has CSEPP as one of his programs since the U.S. Army Defense Ammunition Center (USADAC) has reorganized. Mr. Young explained that USADAC is now located in McAlester, Oklahoma. Joe Hodge is the CSEPP team leader and will schedule all classes. His phone number is (918) 420-8580. USADAC teaches an EMIS course and will move into the FEMIS world during the transition. They have 28 laptops, which they bring with them during their training courses. Mr. Young explained that USADAC will support state and local training and will conduct classes upon request.

**Summary of Presentation 3:** Wyett Colclasure II, SBCCOM, discussed medical training available through SAIC. They provide medical training support to CSEPP. Toxic chemical training is provided at Aberdeen Proving Ground. SAIC also has training which is brought on-site and is site-specific. Communities do not have to pay for this. SAIC will now provide exercise evaluators which is a shift in their efforts. Sites who have a need for their services have to request them, so that funding may be justified. Policy paper number 17, "Request for Technical Support," includes medical support. The policy paper identifies the protocol for requesting support. It will be available in the medical breakout session. The FEMA Regions will be the first point of contact for requesting training.

**Summary of Presentation 4:** Becky Edwards, Arkansas Department of Emergency Management, explained that the state health department requires re-certification for emergency workers every 2 years for the Act Fast training. Arkansas has 10 counties in CSEPP so they needed a shorter version of the class for the refresher course. They decided they needed a video. FEMA came up with funding for a generic video. FEMA, USADAC, SBCCOM, ORNL and Rowland Productions are developing the video. Next week is the start of the actual filming. Many versions of the script were reviewed. Production is due to be completed in July.

**Summary of Presentation 5:** Mr. Allen Jakobitz, Washington Emergency Management, discussed "Using FEMIS in the EOC." CSEPP provides funding for automation requirements. FEMIS off-post is to be integrated with on-post. Everyone is to use FEMIS within 2 years.

Training is of utmost importance to users of FEMIS. Mr. Jakobitz then walked through the daily FEMIS process that Washington State uses to make sure all data is correct and up to date. Additionally he showed some of the enhancements and features available to FEMIS users. A user handbook tailored to each FEMIS station is a helpful tool for users who do not work in the EOC all the time but who do respond during an emergency. Currently Washington State does not use FEMIS for all hazards.

**Summary of Presentation 6:** Robert Norville discussed the CSEPP training crosswalk which identifies tasks being performed by CSEPP personnel. It includes guideline references and objectives. Training management guidance is also available. A CSEPP training website has been developed: **http://emc.ornl.gov**. CSEPP training materials are also sent to the National Technical Information Service (NTIS) at the Department of Commerce. They get all government training materials and reproduce them at cost for anyone who requests them.

**Summary of Presentation 7:** Linda Murawski, ORISE, discussed the JIC Advisor CBT and Advanced JIC course. The JIC Advisor course is now on CD-ROM. The product is for those who work in a JIC or who have need of the JIC function. It is self paced training. It is a cost effective way of doing training. The training was demonstrated by a novice user in the audience. The CD-ROM is both a training course and an information resource system. Videos are included.

#### 2.7 UPDATES

**Facilitator:** Joe Herring, FEMA HQ

**Summary of Presentation 1:** Robert B. Perry, Deputy Program Manager for Business Management, Office of the Program Manager for Chemical Demilitarization (PMCD).

Mr. Perry's presentation focused on the PMCD mission, relationships within and outside of the Army, the status of the myriad PMCD programs, and their challenges. The mission of the PMCD is to destroy all U.S. chemical weapons materiel while providing maximum protection to the environment, chemical weapons workers, and the public. Currently, contracts are in place for the destruction of 86% of the U.S. chemical weapons stockpile. The mission also includes assisting other nations in eliminating their chemical warfare related materiel. The total estimated cost for the program, including the CSEPP, is about \$15 billion. The program is scheduled to comply with the Chemical Weapons Convention (CWC) deadline for completion in April 2007. The most important feature of PMCD is that its customers are the public because the public is the recipient of its products.

Mr. Perry then reviewed the chemical weapons destruction process site by site, beginning with the Johnston Island prototype. Full-scale operations began there in 1993. All GB was destroyed by June 1998. Completion of the entire JACADS destruction project is scheduled for September 2000; as of today, 80% of the Johnston Island stockpile has been destroyed. The Tooele Chemical Agent Disposal Facility was changed considerably to reflect improvements based on experience at the Johnston Atoll Chemical Agent Disposal System (JACADS). Operations started in August 1996; 2775 tons have been disposed of so far, which is about 20% of that location's stockpile. At Anniston, construction is about 50% complete; completion is scheduled for about June 2000. After a 20-month systemization phase, operations are set to begin in January 2002 and to finish by fall 2005. At Umatilla, the incinerator is also about 52% complete; completion is scheduled for about April 2000. Systemization is scheduled to be complete about February 2002, with operations to finish about June 2005. At Pine Bluff, the construction contract was awarded in July 1997. The Resource Conservation and Recovery Act (RCRA) permit was issued in January 1999. Operations are scheduled to begin in Summer 2003, with completion set for September 2006. Schedules for Pueblo and Blue Grass are in hold at the direction of Congress direction pending assessments of three alternate destruction technologies. Testing of these has been completed, with a report to Congress on the test results due in September 1999.

Y2K compliance issues in the demilitarization program focus on plant control and monitoring system. Monitoring systems are now all Y2K compliant. Compliance for all systems is scheduled for September 1, 1999. Except for monitoring and security, operations at all demilitarization facilities shut down on December 31, 1999, as a precaution; on January 2, slow careful startup will proceed to assure safety. Monitoring systems have battery auxiliary power to assure continued operations under all circumstances.

The Non-Stockpile Chemical Materiel Project is responsible for disposing of all chemical weapons-related items that are not part of the stockpile. Non-stockpile materiel includes empty ton containers, binary weapons, former chemical weapons production facilities, recovered chemical weapons materiel, and other items. Many potential sites have been identified. PMCD is responsible for assisting the Army Corps of Engineers as lead agency.

Q: With reference to the Treaty deadline. Pueblo and Blue Grass are beyond the timeline already. What is actually going to occur?

A: PMCD's position is that demilitarization will be complete on schedule in 2007. I agree with you that there may be some uncertainty about that. We are working on that.

Q: You mentioned systemization concurrent with construction. How can you do that?

A: Umatilla is an example. Construction of the containerization buildings will be completed early in the construction process. We can begin testing that portion of the project prior to completion of the whole complex.

Summary of Presentation 2: Mr. Herring then introduced Mr. Jeffrey Glick, Chief, Assessment Branch, Readiness Division, Preparedness Directorate, FEMA. Mr. Glick discussed the FEMA Capabilities Assessment for Readiness (CAR) program. The CAR program is a process to collect, analyze, track, and report quantitative state emergency readiness in its totality. It was developed at U.S. Senate Appropriations Committee direction in cooperation with the National Emergency Management Association (NEMA).

CAR is divided into thirteen emergency management functions. It facilitates a state-FEMA, state-local dialogue on a function-by-function basis for all hazards. It also interfaces with National Fire Protection Association (NFPA) Standard 1600. CAR provides useful data for strategic planning and budgeting. Its focus is on state activities, with local input. All 56 states, territories, and insular areas participate. In final form, CAR relies on Microsoft Access and uses a numerical scale of 1-5 for participants to use in self-assessing each of the thirteen attributes. Using an earlier numerical scale, states participating in the CSEPP generally scored higher than non-CSEPP states, especially on hazard identification and risk assessment. The final draft CAR instrument will be circulated through NEMA for comment by all states by July 1999. The final report will be issued to Congress by October 2000.

Q: Under your initial CAR states were performing a self-assessment using a rating scale of 1-3. Are they still doing that?

A: Some states made local versions of the CAR and are testing that. Some states repeated our CAR on their own.

Q: Isn't the whole process subjective?

A: It remains a self-assessment and is inherently subjective.

Q: Would it be more objective if integrated with NFPA Standard 1600?

A: How to do that is an open question. Should the results be peer reviewed? Should the FEMA Regions review the results? It remains a self-assessment.

Q: "Yes" or "No" answers could be used to avoid subjective responses.

A: Yes, but that would not show progress from one survey to the next. The push is to use a rating scale of 1-3, 1-5 or 1-10.

Q: Have you considered using real disaster experience to test the criteria?

A: Yes, we asked about real world experience, exercises, and plans to test the format. In the old assessment we asked what respondents used as the basis of their responses and 95% said that they used real world experience, so that information was of little use.

Q: What if all states bought off on the NFPA 1600 Standard with the CAR process?

A: We are working to integrate the standards in the instrument. The NFPA standards dovetail well with the new CAR form. Revised standards are coming from NFPA also.

Q: Could we go with yes/no with sub-elements to use to track progress?

A: It would still reflect someone's opinions. We can't avoid that. We are developing a variety of documents to help define the elements and describe how to respond to them. The first CAR report was developed and completed in a very short timeframe. Currently we have more time to refine the process and provide more assistance to participants.

Q: The report you handed out compared CSEPP and Non-CSEPP preparedness. Do you have similar data for radiological emergency preparedness (REP) only or REP/CSEPP or Domestic Preparedness compared with REP or CSEPP?

A: There is a REP page in the report, but it does not compare CSEPP/REP. The program has substantial cross tabulation capability. This can be done with the first run. And we will be able to crosswalk with the new data, but, due to the first data collection based on ratings of 1-3 and the second using 1-5, we will have to collapse the 1-5 data. This will result in loss of some accuracy, but we feel that the resulting data will be somewhat useful.

**Summary of Presentation 3:** Finally, Mr. Herring introduced Mr. Lawrence Skelly, Special Assistant for the Office of the Assistant Secretary of the Army. Mr. Skelly's presentation discussed the Automation Integrated Product Team (IPT), which included a variety of participants. This IPT was formed at the direction of Assistant Secretary of the Army Raymond Fatz and held its first meeting at the end of July 1999. A core of 15-20 participants, including representatives of four States and four Immediate Response Zone counties, serve on the IPT. It has held six meetings and made recommendations to the CSEPP programmatic leadership.

The Automation IPT recommendations were to use the same automation system on- and off-post, making it multi-hazard model interface-capable, and that it should soon have applications outside of CSEPP (e.g., other states). These recommendations were approved on May 24, 1999. The final report will be available on the CSEPP web page (http://csepp.apgea.army.mil) in the near future. FEMIS will be the baseline platform with established milestone reviews. A users working group will be established to include both on- and off-post users.

The Automation IPT's mission was to review EMIS and FEMIS, the existing automation systems that support CSEPP and to provide recommendations and supportive analysis on requirements, effectiveness, cost effectiveness, and long term management requirements. The Army's automation requirements are for crisis response, whereas the requirements of states and local governments also include a need for planning capabilities. The IPT assumptions are that: CSEPP improves the decision

making process and enhances readiness and response; the user requirements list (411 items) originally developed remains valid; on-post response and off-post preparedness and response are equally important, and the user priorities remain unchanged.

The IPT considered three alternatives -- maintain the status quo, move to a single application, or start over. The status quo, with both EMIS and FEMIS, was too confusing in inter-system communication. Starting over would be extremely costly and time-consuming; management support was lacking. After reviewing the analysis results, the IPT's conclusion was that the FEMIS baseline was the best alternative. The major fix that is needed is to improve the speed of FEMIS and its off-post user interface. Planning functions need to be added. The IPT's conclusion was that FEMIS leverages the current investment of dollars and training.

A two-year implementation plan will be followed, with milestone reviews much like other Army acquisition programs. A configuration management mechanism or group is to be established by October 1, 1999. A User Group is to be established by October 1, 1999. Exercise objectives will be included as a way to identify system strengths, weaknesses, etc. Year 1 of the process started in May 1999. EMIS was frozen as of May 1, 1999. Build 1.4.6 will be released in June 1999, and installed by December 1, 1999. FEMIS development will focus on the top priorities of the User Group, enabling model capability for HAZMAT, radiological emergency preparedness, and domestic preparedness. During Year 2, FEMIS version 1.4.7 will be released in May 2000 and installed at all sites by December 1, 2000. Gradual site phase out of EMIS may begin 90 days after FEMIS installation. Final modifications will be made, followed by maintenance. FEMIS 2.0 will be released in May 2001 and installed by December 2001. The User Group will include on- and off-post representatives to assist developers and make recommendations to a Technical Working Group. The Technical Working Group is comprised of program managers, technical experts, and users. The Technical Working and User Groups are to be established by October 1, 1999. A Milestone review schedule is being established. After Year 2 FEMIS will be in a maintenance and support mode. Mr. Skelly indicated that CSEPP will not field a system less capable than the current system.

Q: Will the single system be Windows NT-based or UNIX-based? The states and counties prefer Windows NT as the basis because of the higher licensing costs for acquiring the UNIX-based Oracle data base program.

A: UNIX is more reliable and is expected to be retained. There is some possibility that developing technology will solve this problem.

Q: Who will appoint the members of the User and Technical Working Groups?

A: The Automation IPT has essentially finished its work, except for the core of FEMA and Army personnel. Volunteers for these groups are being sought and can make themselves known now. A draft charter will be circulated for comment in order to assure an effective User Group.

Q: Once CSEPP is gone, will the models embedded in FEMIS be usable for other hazards? Will other models be usable on this system?

A: Yes. These models can be used now on a manual basis. An interface will be provided.

Q: During the next two years, will the D2PC puff model be incorporated into FEMIS?

A: That is an Army decision based on the technical qualification of the model through the Army qualification process.

Q: Please comment on Department of Justice interest in FEMIS and the possibilities for funding.

A: A tiger team made a presentation to the National Defense Preparedness Office and meetings are ongoing. Director Witt and Attorney General Reno met and CSEPP was one of the topics discussed. There is discussion about moving programmatic and other activities to Domestic Preparedness.

#### 2.8 ROLE OF NATIONAL GUARD

Facilitator: COL George A. Becker

**Summary of Presentation:** COL George A. Becker, Plans, Operations and Military Support Officer, Utah National Guard.

The first part of the presentation covered the CSEPP roles and missions of the Utah National Guard. During the creation of the program in Utah, the Guard was brought in for the initial planning of developing CSEPP at the direction of the Governor. The Utah Guard has been involved with and in the program as a player from the get go in Utah. Their role and missions have changed over the years due to force structure changes and the maturing of the CSEP Program in the state of Utah. The Guard will never be first responders; that is the responsibility of local counties and authorities. The Guard's role is that of support and augmentation. The counties and local authorities clearly understand this role of support and assistance. COL Becker covered the four CSEPP missions currently assigned to the Utah Guard. Their participation and accomplishment of these missions are at the direction of the Governor as he issues the activation order for the Guard, clearing a way for their active response measures during an event.

The mission taskings in general do not relate to the Guard's Federal mission. The man days required to fund the support of these taskings are done internally with state funding thru FEMA versus federal funding thru the National Guard Bureau. This year was the first time the Guard was allowed to budget specifically with FEMA for CSEPP training and exercise participation for Guard personnel, rather than being funded indirectly through the state. He indicated this was of tremendous help to the Guard in their preparations and planning efforts to support CSEPP.

In normal duty status, Monday thru Thursday 0700-1700 hours the Guard can provide a two hour response, at other times, 10-12 hour response. There are ten national RAID teams that will be on federal active duty if required for support of state and county jurisdictions. When the Guard is on Federal active duty, the soldiers use the Army issued Mission-Oriented Protection Posture (MOPP) gear. When activated by the state, they must comply with Occupational Safety and Health Administration (OSHA) standards and use the appropriate equipment as approved by OSHA and HAZMAT standards. The Utah Guard uses a modified Level B OSHA approved PPE when operating in a state active duty status supporting CSEPP.

COL Becker provided a slide presentation covering the Decontamination Facility located at Camp Williams, the Guard's mobile decon equipment, operation procedures, and discussed the support of Tooele and Utah counties.

The second part of the presentation at the first session consisted of a panel of Oregon and Arkansas National Guard personnel. At the second session, the second speaker was a Guard representative, CPT Carl Pond from Oregon. He provided a brief status of the CSEP Program in his state. They do have limited plans to respond to an event at Umatilla Depot. The biggest problems they face are the locations and type of units in relation to the depot and lack of funding. He reported that the Oregon Guard is not at the same level as the Guard in Utah, and will be coordinating with them for advice and assistance in improving their level of preparedness and response capabilities.

The following is a summary of questions and answers from both sessions.

- Q: Was your decon building built with CSEPP funds?
- A: Yes.
- Q: How large is this decon building?
- A: Approximately 46 by 124 plus feet.
- Q: What kind of people are doing your medical screening?
- A: Medical personnel do the screening at the decon facility.
- Q: What type of PPE are used at the decon building?
- A: Modified level B.
- Q: What is the location of the decon building in relation to the depot and incinerator?
- A: Forty to sixty miles.

- Q: What is the throughput of the facility?
- A: We plan to operate 16 hours, our only measure of output is just for exercises, so as far as a firm figure, we think about 40 or 50 per hour comfortably, more if necessary.
- Q: While going through the process, suppose someone says they are not contaminated and want their valuables and clothing back, what do you do?
- A: If they are cleared by medical personnel, then we release them and return their stuff.
- Q: How many people do you have in the IRZ?
- A: About 35,000, but these figures vary according to the time of day and day of the week.
- Q: Do the people who say they are not contaminated, do they sign a wavier?
- A: Yes.
- Q: Who keeps the training records of the Guardsmen supporting CSEPP?
- A: The CSEPP coordinator.
- Q: Who is responsible for the medical screening and how do you handle limiting medical conditions?
- A: The screening process to work in and support CSEPP is done under the direction of a physician. Any medical conditions that would prevent their participation in the program is strictly confidential and not released back to their unit because of legal implications.
- Q: How do you handle the selection of personnel to support CSEPP?
- A: Strictly individual volunteer versus unit assignment, which gives us a lot of flexibility.
- Q: How many people can you get through the mobile decon facility?
- A: Not very many at a time due to its size.
- Q: What is the role of the Guard in operating the mobile decon equipment?
- A: We are in the support/augmentation role for the local authorities.

- Q: Do you have any monitoring equipment?
- A: We have CAMS.
- Q: When you say OSHA approved the use of modified B PPE, which one?
- A: State OSHA who represents federal OSHA, recognize this could be different in each state.
- Q: What is the requirement for guard soldiers to have above level C since FEMA policy is not to send personnel into a contaminated area.?
- A: We use them at traffic control points (TCPs) and must have protection in the event of exposure to agent. We have them in modified level B to comply with state OSHA requirements.
- Q: Are people who are wearing modified B suits being provided auto injectors?
- A: Yes, and training for their use.
- Q: Where do you get bulk antidote quick?
- A: Karen Cleveland said this was one of the issues FEMA HQ was working.
- Q: Can we get copies of your work rules and the state OSHA ruling on the use of modified B PPE?
- A: (DeRoy Holt asked they submit requests to him and he would coordinate providing the requested material.)
- Q: Are there in plans or thoughts to bring in a Public Affairs unit in the event of an incident?
- A: No, we have a PAO who will provide support at the JIC.
- Q: Do you have any assigned roles with the hospitals?
- A: To a certain degree, we have equipment they can use.
- Q: Do you have any taskings for admin/clerical personnel to augment EOCs?
- A: Yes, we have some task teams organized to augment the state and counties EOCs as requested.

Q: What is the role of the Guard in domestic preparedness to counter weapons of mass destruction?

A: The ten RAID teams located for national support, and there are plans for each state to organize their own teams. We are organizing a 22 man RAID team, about 50% complete now.

#### 2.9 PUBLIC AFFAIRS

Facilitators: Steve Horwitz & Mary Alice Binder

**Summary of Presentation 1:** Meg Capps, Umatilla County, Oregon, Public Information Officer, led a team presentation of a proposed public awareness campaign designed to use broadcast and print media to reinforce CSEPP messages and public awareness. The draft Umatilla Community Strategic Media Plan was distributed to breakout session attendees in hard copy for feedback to co-authors by July 1. Target date for completion of the revised draft is July 15.

The Strategic Media Plan development task was undertaken by the Umatilla PIO/PAO contingent at the CSEPP Public Affairs Conference last December in Seattle, Washington . The goal was to develop a model or prototype public awareness media campaign strategy that could be modified for use in each CSEPP community. The plan outlines a comprehensive and sustained public education and awareness campaign to support and enhance the community's ongoing outreach program with particular emphasis on "what to do when sirens sound."

The plan addresses goals; message development; strategies; comparative strengths and weaknesses of ad campaigns using television, radio and newspapers; costs; use of media surveys and rating information (Arbitron and Nielsen) to identify reach, audiences and demographics of media outlets; how to achieve optimum effectiveness from radio, television and print ads; and campaign evaluations of effectiveness.

Ms. Capps said the Umatilla plan envisions a year-long campaign with simultaneous and repetitive use of television and radio paid advertising supported by ads in newspapers over a one-week period each month, i.e., a media blitz to ensure that the public in and around CSEPP emergency planning zones is aware of CSEPP and informed about what to do in the event of a chemical stockpile accident.

Ms. Capps stressed that the plan is a draft and urged breakout attendees to provide constructive comments and suggestions to improve and expand the plan to members of the development team.

Other members of the presentation team were: Mark Clemens, Washington State Emergency; Jim Hackett, Umatilla Chemical Depot; Troy Berglund, Benton County (WA) Emergency Management; and Jesse Seigal, FEMA Region X. Other members of the development team are: Tom Worden, Oregon Emergency Management; Mary Alice Binder, Umatilla Chemical Depot; and Dan Knoll, Morrow County (OR) Emergency Management.

It was suggested that State Broadcasters Association can be used as an information source on viewing audiences of potential stations and may lend other campaign support. Ms. Capps said the suggestion will be incorporated in the next version of the plan.

Ms. Capps said that while cost estimates are addressed in the plan, costs will vary from community to community. She stressed that a campaign generated from the local community will cost less than a program-wide campaign developed and run from the national level. The estimated cost of the one-year Strategic Media Campaign for the Umatilla community is \$275,244. It was suggested that advertising campaigns on cable systems may not be as expensive as other television advertising and should be included in plans for communities where applicable.

Q: Will locals be able to budget for a media campaign?

A: (S. Horwitz) Such a budget item would have to go through the same review and approval process as all budget items and a mass media campaign would need to be based on a sound and detailed strategy plan. It's not too early for sites to put it (campaign funding) in black and white in the budget. Even if you decide later not to go forward, it's a good idea to get it in your budget now.

The suggestion was made that FEMA headquarters may be able to "do some common spots" that could be used in the campaigns by all eight sites. Mr. Horwitz said the suggestion will be taken under consideration.

**Summary of Presentation 2:** The status, purpose and process of the Stakeholder Survey underway for the Program Manager for Chemical Demilitarization was discussed by Marilyn Tischbin, Chief of Public Affairs, Office of the Program Manager for Chemical Demilitarization, and George L. Angerbauer, Booz, Allen & Hamilton, Inc.

The survey purpose is to: accurately describe stakeholder communities, identify issues of importance to stakeholders (perceptions, concerns, how they would like to receive information) and improve public information and involvement efforts (address misperceptions, resolve concerns and deliver messages through appropriate channels). Designed and administered by the University of Arizona, the survey is expected to be completed this month with initial results and recommendations available in August or (more likely) September. CSEPP representatives on the survey team will have survey results information two weeks before public release of results to communicate with state and federal counterparts. Publication of results in scientific journals is expected within three to six months of initial release of results. A presentation on the survey results will be made at the December CSEPP Public Affairs Conference in Dallas.

Ms. Tischbin said survey results will not be available to assist CSEPP PIOs in development of calendars due to go to press in September. She also said she hopes to keep the University of Arizona experts conducting the survey on retainer for similar or follow-on survey work.

Ruth Flanders, SBCCOM, cautioned attendees not to sign any agreement relating to the shelter-inplace symbol Wally Wise Guy pending resolution of the dispute over trademark ownership.

Due to a travel conflict, Ms. Tischbin and Mr. Angerbauer were unable to attend the second public affairs breakout session; at that session, Ms. Binder addressed the survey topic:

A show of hands indicated everyone in the room was familiar with the survey. Ms. Binder said the survey is expected to be complete by the end of July. She said Army public affairs representatives on the survey team will meet in Aberdeen, Maryland, the second week in August to discuss preliminary survey results and develop messages and strategies. However, she said survey results are not expected to be available until late August or early September and will not include raw data. A presentation on the survey results will be made at the December CSEPP Public Affairs Conference in Dallas.

Breakout attendees expressed concern that the survey results go to all sites at the same time. This concern also was raised in this week's State Director's Meeting and will be on the agenda for the next meeting of State Directors, according to several attendees.

Attendees also questioned why raw data that could be helpful to the proposed mass media campaign and other education and outreach projects is being withheld. One attendee said, "I'm not willing to take this leap of faith. I'm not shooting down the survey process but I am questioning why we can't have the raw data after the results are complete." Another attendee said a survey being conducted in the Anniston CSEPP Community by the University of Alabama at Birmingham will provide both results and raw data. Ms. Binder said she would take both issues back to Ms. Tischbin.

Ms. Binder also passed on a caution to attendees not to sign any agreement relating to the shelter-inplace symbol Wally Wise Guy pending resolution of a dispute over trademark ownership. The recommendation was made in Wednesday's session by SBCCOM attorney Ruth Flanders.

#### 2.10 COLLECTIVE PROTECTION

Facilitator: Rob Weiss, SBCCOM CSEPP Office

**Summary of Presentation 1:** Mr. Weiss gave an overview of overpressurization system installation progress for Alabama, Oregon, Maryland, Kentucky, Indiana, and Arkansas.

Q: How do you cool the shelter in a hot humid environment?

A: There may be a requirement for an integrated HVAC system.

Q: How will the operation of the system be evaluated for exercises?

A: Procedures will have to be developed with the Army.

# **Summary of Presentation 2:** Michael Janus, Battelle Memorial Institute.

There are 3 protective actions: evacuate, shelter in place and positive pressure collective protection (CP). Positive pressure CP minimizes diffusion of agent into the shelter and extends the possible stay time in the shelter. The filtration units provide breathable air in the shelter. Maintenance and training are critical to successful operation of the over-pressure system. The positive pressure systems being installed are standby systems that may be separate from or may be integrated with HVAC systems.

Experiments were conducted to determine agent infiltration into structures. Passive filtering measured against natural air exchange was determined in a best case scenario (minimum infiltration). Sheltering in place proved to be more effective than simple air exchange estimates predict. Passive filtration is significantly higher for HD than GB. Expedient sealing measures significantly increased the protection factor. Fan pressurization is a valuable tool for estimating shelter air leakage. Leakage reduction is very cost effective for reducing air infiltration and as a result, decreasing the filter and blower size and heating and cooling loads. The system must be secured. The CP system must be maintained properly to ensure reliable operation. Protective envelopes should be selected based upon operational characteristics and building characteristics. The newest structure is not necessarily the best envelope to use. Bathrooms and drinking water should be included in the shelter. Focusing on reducing the primary leakage pathways can reduce the system requirements.

In the future, research data will be developed to provide additional tools for use in the field. Recirculating filters may have potential for enhancing the protection afforded by a shelter in place.

- Q: How are leaks controlled through plumbing air vents into the building?
- A: Test has shown this leakage to be minimal when compared to other leakage sources.
- Q: We need something to take to the public that is easy to understand that explains how taking shelter in these shelters provides protection from these very toxic materials.
- A: The reports that can be requested give a technical explanation of the protection offered by the shelters.
- Q: Are existing chemical shelters going to be evaluated?
- A: Yes, some of them have promise for protecting small groups.
- Q: Are any ion filters being researched in off-the-shelf purifier experiments?
- A: No, we are only testing HEPA/carbon filter systems that can be purchased for about \$100.

Summary of Presentation 3: Eric Richardson, CSEPP manager for FEMA Region X, gave a presentation on the history and lessons learned about collective protection at Umatilla with primary focus on overpressurization projects. He listed the facilities that are getting overpressurization and potential future projects. He emphasized the following about overpressurization projects: advanced planning is very important so that the number of the facilities requiring overpressurization is minimized; know what you want before you start any projects; ensure that operations and maintenance manuals are available for the facilities that are overpressurized; insure that checklists are developed; ensure that Army systems procedures are completed; ensure that overpressurization filters are suitable for the various hazards that the facility may be exposed to; consider the communications requirements while the facility is overpressurized; follow-up with the system vendor so that all elements of the contract are delivered; be aware of the difference in leverage between private versus public facilities when proposing overpressurization projects; and take into account public education considerations when planning to overpressurize a school. He emphasized that the public should be made aware of the benefits from overpressurization systems beyond protective collection, such as state-of-the-art heating and air conditioning systems. Also, the public must be educated not to break the over-pressure shelter envelope. The envelope must be protected to maintain the protection for the designed population.

Q: Do overpressurization vendors get indemnification for installing overpressurization systems?

A: (from audience) A county CSEPP manager said that his county did not include any indemnity clause in its statement of work and they still received bids for the proposed work.

### 2.11 ALERT AND NOTIFICATION

Facilitator: Russell Gates II, Information Technology Services Directorate, FEMA

**Summary of Presentation 1:** Mr. Gates introduced the panel members. He then gave an overview of the Tone Alert Radio (TAR) efforts at CSEPP communities. He described this effort as expensive and labor intensive. FEMA is using a laboratory in Round Rock, TX, to test CSEPP TARs. The testing company was selected on the basis of cost and the ability to do set-up and testing in one place. So far they have found a few bad samples, but do not have an assessment of the significance of this data. Mr. Gates also remarked that several states have completed a planning cycle to use TARs, and encouraged that this information be shared.

Q: Are the tests being conducted on the TARs lab bench or field?

A: The Oregon TARs are being field tested, as well as independent lab tested. So far, there have been one or two problems discovered during the testing process of the finished products.

Q: Is there a problem with propagation and mix with siren?

A: Need to do both field and lab tests due to terrain, vegetation, and simulcast concerns.

- Q: How many labs are doing the testing?
- A: All tests are being done at the Texas lab using one set of test procedures.
- Q: Is FEMA going to waive the UL requirement on TARs?
- A: No. The testing lab does have UL testing and certification capability.
- Q: Is FEMA going to test all TARs for all the sites?
- A: Yes, with exception with Tooele's TARs. Tooele County has first generation TARs; the TARs being ordered today are significantly different than this older type.

Summary of Presentation 2: Dave Williams, Communications System Technician, Tooele County EMA, provided an overview of the current Tooele County microwave system. The system was initially completed in 1994. It supports 800 mobile radios. It is a complete backbone microwave system and is based in the County Courthouse, with battery and solar backup. It includes siren and TAR components. The TARs have National Oceanographic and Atmospheric Administration (NOAA) weather data availability. 800 MHZ radios are located in area schools, on school buses, and with the road department. Two years ago Tooele County purchased a new Radio Access Control Switch system to integrate and interface with all emergency communications – high and low band radios, state communications channels, National Guard channels, and other emergency communications systems, including a link to amateur radio operators. Emergency personnel can use cell phone dial-in and regular telephone lines to make contact.

Lou Little, Notification Systems Technician, Tooele County EMA, discussed Tooele County TARs. The TARs installed in Tooele County are the oldest in use in CSEPP, because installation of TARs was needed to support the start of chemical demilitarization. The TARs have battery backup and are tested weekly. So far there have been 5 equipment failures out of approximately 1100 installed TARs. Sustaining a viable TARs is a challenge in Tooele County because of the rapid growth in population.

- Q: Do you collect statistics on the serviceability of installed TARs?
- A: Not specifically. Just know reports of failure from users.
- Q: Do users disable installed systems, or otherwise defeat their use?
- A: This does not appear to be a problem. Public is generally receptive to use of TARs.

Q: Communities in the vicinity of nuclear facilities require a call-down to confirm that TARs work. Has Tooele considered such a program?

A: No. This is a good idea and might be worth considering.

Q: Are TARs used routinely during monthly and quarterly exercises?

A: Not usually.

Q: Does Tooele make prior news releases to announce TARs tests?

A: Yes.

Q: Do you have a problem of people taking radios?

A: There is a lot of growth and turnover in the area, and radio disappearance is a problem. Tooele County considers it a public affairs issue. Information on having a TAR in each residence is given to new residents identified through requests for water service, garbage collection, and other services. A form letter goes out to each new homeowner to see if a tone alert radio is present at that location.

Q: Where do the ones go that leave Madison County?

A: It is a problem if people move between zones since each radio is keyed to a specific zone. The only way to combat the problem is through public relations, but that does not solve all the problems.

Summary of Presentation 3: Don Miller, Telecommunications Project Manager, Washington State Emergency Management Division, demonstrated the latest generation of TARs being acquired for installation in the State of Washington. Cost is approximately \$130 per unit from Tandy. The radio has the ability to display and sound a weather warning from NOAA. The State of Washington has applied to the Federal Communications Commission (FCC) to give them codes for other hazardous facilities in the area, such as nuclear power plants and refineries. The State is purchasing 550 TARs for CSEPP needs. The TAR recipient cannot adjust the volume level for the CSEPP signal, but can program out or turn down the volume on other codes and alerts. A label is affixed to each unit to tell the user who to call if the unit is malfunctioning.

Q: Is there one CSEPP frequency and how many others can be programmed?

A: There are 7 codes available. One is designated for CSEPP, the rest of the codes will be allocated among other hazardous facilities or weather needs and programmed in by CSEPP.

Q: Who can activate the radios?

A: The TARs are activated through a computer front end and can be triggered from one of three locations -- on-post EOC, off-site EOC, and State location. They have their NOAA ability from Pendleton.

Q: What does it take to install? Drill in wall, have a security person on standby to get into a house?

A: In Washington, there is a language barrier due to a large Hispanic population. Installation has been simple, hand the person a manual and show them how to program in the other codes they wish to listen to. The CSEPP code is put in by a computer and cannot be changed.

Q: How did Kentucky install its TARs?

A: Had the fire department install them for \$6 for each one installed.

Q: Looking at 70,000 units in Alabama. There is a concern about responsibility over operation between NOAA and the user. If a user has problem with weather alerts who do they call? In a simultaneous emergency broadcast, who interrupts whom?

A: If a user pushes a button and has a signal stream problem, then they can call an 800 number on top of the TAR. There is an LED display on the TAR which describes what the problem is - battery, signal, etc. The State can cut off the NOAA signal. NOAA has the benefit of being able to use the CSEPP towers and capabilities.

Russell Gates closed the formal presentations by inviting conferees to examine TARs on display.

#### 2.12 MEDICAL

Facilitator: Joe Herring, FEMA / LTC (Dr.) David Mukai, SBCCOM Surgeon

LTC Mukai opened the session with comments about medical readiness planning. He indicated that there has been a shift of responsibilities to FEMA for reviewing things medical and working with state and local entities. Copies of Policy Paper 15 and protocols for requesting medical support were distributed. LTC Mukai emphasized that FEMA needs budget requests through the FEMA Regions two-years in advance of the need. CDC guidelines and speakers' presentation notes were made available to session participants.

**Summary of Presentation 1:** LTC Mukai introduced Mr. Daniel Bird, Chemical Stockpile Medical Coordinator, Science Applications International Corporation. Mr. Bird discussed the CDC guidelines which include guidelines on off-post medical preparedness. EMAs and state health departments need to work together to integrate medical plans with community disaster plans. Medical plans should

include training of medical personnel on decontamination and treatment of chemical warfare agent (CWA) casualties. Plans should consider whether use of PPE will be necessary. Regulations affecting these activities include 29 CFR 1910.120 and 134.

MOUs are very important. It is important to know you have support coming. Consider how to handle further treatment of chemically contaminated patients. How do you certify decontamination? What is appropriate transportation for contaminated patients? We want to be sure that the workers understand what their capability is and responsibilities are in accordance with MOUs.

In Utah hospitals have adequate stockpiles of antidote and decontamination solution to provide complete treatment. Disaster plans for hospitals have to account for accepting non-chemical patients through controlled access. A chemical incident doesn't stop other non-chemical issues, e.g., Ob/Gyn, infant and regular illness and injury. Is the normal flow of patients separated from incident patients?

The medical preparedness evaluation process needs to be complete 12-18 months prior to start of the incinerator trial burns. This must be coordinated with appropriate state agencies; health, environment, occupational health and safety, emergency management, etc.

There are a lot of different guidance documents. Use a group of experts to review and evaluate the various guidance documents to assure that you are in compliance with those that apply. This should lead to a formal report to the state.

**Summary of Presentation 2:** LTC Mukai then introduced Lloyd Baker, CSEPP Coordinator, Utah State Health Department. Mr. Baker indicated that he would be talking about lessons learned from the perspective of the Utah Department of Health.

The Utah CSEP Program involves at least 12 agencies: Tooele, Utah and Salt Lake Counties; Utah Department of Environmental Quality (DEQ), Utah Division of Comprehensive Emergency Management (CEM), Utah Department of Agriculture and Food, (marketing agricultural products post incident), Utah OSHA, Utah National Guard, Utah Department of Transportation, and American Red Cross. The Utah Department of Health found it best to invite everybody with even a remote interest in the problems to the table. The various entities found that they would have to come together to decide such issues as PPE, training, supplying equipment, etc. A dispute between the Health Department and CEM over CSEPP medical roles culminated in an MOU outlining future joint work.

The event of most practical help was a health program review by CDC. To make presentations to CDC the State agencies had to get together as a group and present a comprehensive emergency plan. During dress rehearsal the state agencies learned that they had to work together. This substantially reduced stress among the agencies and made for an efficient and effective presentation to CDC. They coordinated the plan with each agency, explaining their mission and guidelines. The CDC panel concluded that the plan was sound with some exceptions and gave an authoritative stamp of approval to the State's direction. The panel also pointed out areas needing attention. The Health Department

was aware of the areas and need for equipment, but did not have sufficient funds. CDC provided a lever to assist the Health Department in acquiring needed funds. An additional benefit was relationships developed between CDC experts and the Department of Health. Panel members were national experts across the areas of interest. Panel members continued to provide assistance and advice after the meetings. CDC learned that individual States could identify their needs and that one approach does not fit all states. CDC will not come with a preexisting agenda.

State agencies had to address what type of event to respond to, maximum credible event (MCE) or maximum *possible* event? Utah chose MCE as more likely. CSEPP exercise objectives and Points of Review (PORs) were used as guidelines. Utah determined that when they could be met the State would be ready. Not completely done, but ready. For example, Utah had to have MK 1 kits and a reservoir of trained medical personnel available, but did not need Real Time Analysis Platforms (RTAPs) if the Army would commit to providing them in a timely fashion.

Q: How did CDC fit with self-assessment for Governor?

A: CDC set minimum guidelines. When we met those guidelines we could say we were ready in the medical area. Medical is more objective than other areas. We had a plan. They blessed some of it and recommended additions to other parts of it.

Summary of Presentation 3: LTC Mukai then introduced Dr. Richard Alcorta, Maryland CSEPP State EMS Medical Director. Dr. Alcorta distributed "Meeting the CSEPP Challenges". He said that the appendix includes a summary of the summit concerning terrorism and issues from Maryland exercises. The material is applicable to weapons of mass destruction (WMD) as well as CSEPP. Dr. Alcorta indicated that his perspective is a bit broader than just CSEPP. His presentation focused on a checklist for emergency planning and preparedness to see how it applies to your program. Preparation for terrorism is exactly the same as for CSEPP. Both are dealing with agents designed to hurt. CSEPP may be somewhat easier as the chemical agents and their locations are known at the onset.

Dr. Alcorta indicated that of the total victims of a natural disaster some 15% are admitted to hospitals, but only 10% are transported by EMS. This means that the majority arrive at hospitals outside of the emergency management system. He said that effective coordination and use of emergency resources is a big problem because the unplanned use of resources exhausts the resources early in the response. He cited the example of a recent flu epidemic in Maryland which quickly exhausted available resources and lead to transportation of patients to other states. Further he noted that in HAZMAT incidents only about 18.5% are decontaminated at the site. And most triage and search and rescue is provided by civilian volunteers (transport also). Since we can not educate the entire public we need to prepare the hospitals and other health care facilities.

Another problem stems from the fact that most disaster plans use procedures not commonly performed on a daily basis. This leads to inefficiency and confusion when the procedures are required, particularly in an emergency situation.

Emergency preparedness lacks political and public support. The problems are low probability, high consequences events. The public is not willing to put much effort into events that are highly unlikely. Good news of a sort is that the public and media are more concerned with WMD. This can be useful in generating participation. We need to be a bit broader than CSEPP to capitalize on such opportunities.

Dr. Alcorta listed disaster planning principles, including: developing strategies to overcome resistance to preparedness; incorporating all responsible personnel; keeping tasks familiar to personnel; determining who is most appropriate for the task (doctors are different from police); keeping it simple and cost-effective; concentrating planning on what is most likely to occur; motivating participation (consider providing food for volunteers, etc.); using the media topic of the day, such as WMD, to involve more people; ensuring access to health care service; maintaining in-depth flexibility in medical services; incorporating primary care doctors in planning; developing alternative forms of communication; planning for modular expandability of response, keeping the media well informed; and involving media CEOs (not reporters) in planning activities.

Hazardous materials such as industrial releases/incidents, transport releases, nuclear releases/incidents (hospital radiological waste), biological releases (flu, disease) are actually fairly common. Undetected CWA releases may at first look like biological symptoms. Doctors need to be able to identify the problem. And there is a need for quick notification of the release and its cause.

Dr. Alcorta went through an extensive and detailed set of viewgraphs covering all aspects of emergency preparedness from a medical perspective. He mentioned that the CSEPP planning program and lessons learned should be used as a template for the planning processes across the state, not just for CSEPP facilities since many of the personnel migrate to other emergency agencies and should provide a common backbone throughout the emergency management arena. He stressed that when conducting training at hospitals we need to go beyond the normal emergency room doctors and nurses and include the hospital fire, security and house keeping staffs as well. He concluded by suggesting that participants review the material in the handouts.

LTC Mukai closed the session commenting that we all have to work with the resources we have available. He thanked Paul Roberts of Argonne National Laboratory for his many contributions not only to the presentations, but to the medical program as a whole.

### 2.13 PLANNING

**Facilitator:** Joe Herring, FEMA HQ

**Summary of Presentation 1:** Mr. Herring informed the attendees of two goals that Russ Salter has identified for FEMA and the CSEPP community for the upcoming year: (1) improve public awareness, and (2) improve planning. There are multiple planning resources and tools available to assist the planners in the CSEPP. Planning guidance is going to be revised. The goal is to have consistent

planning at all CSEPP sites. Innovative Emergency Management, Argonne National Laboratory, Oak Ridge National Laboratory, and Pacific Northwest Laboratory will make presentations on the planning tools they have developed. Points of contact for the planning tools, a list of FEMA planning courses, and a list of planning related WWW sites were provided.

Mr. Herring discussed the emergency planning process, highlighting the cyclical nature of planning. He indicated that a planner can start at any point in the process. The cycle for improvement of plans incorporates reviews, exercise results, and resulting revisions. He then discussed the relationship of the different planning tools to the steps in the planning process. All of the planning tools have a multi-hazard capability.

In conclusion, plans are a necessary part of achieving protection. Automated tools and services are available to support planning. Tools and services cover different parts of the planning process. Planning is a continuous process.

## Summary of Presentation 2: Ted Lemke, Technical Director, IEM

IEM has been working on the D2-PUFF model for chemical hazard dispersion, under the direction of Mr. Myirski, SBCCOM. D2-PUFF is based on the D2PC model. The new version of the model will run on a personal computer and integrates and includes variable meteorology and terrain capability. The model is undergoing Independent Verification and Validation and will then undergo the Army's acceptance process. The delivery schedule was discussed. One design requirement was that the model be able to be integrated into existing automation.

The IEM system analysis process was presented. Systems analysis was performed at all CSEPP sites during the years 1993 and 1994. Systems analysis is a structured examination of response to a single scenario. Systems analysis compares response time to the hazard arrival time to determine if protective actions can be concluded in time to protect the public. The outcome is a number which represents the time available to reach a protective action versus the planned response. For example if protection was required in 60 minutes, but the planned response takes 90 minutes, the result would be an estimate of 150% of the time available. The advantages and disadvantages of using the analysis, from the IEM perspective, were presented.

Quantitative Emergency Management (QEM) uses information technology to run simulations to come up with science based metrics for solutions to significant events. Built from systems analysis, this product presents a refined hazard analysis. QEM analyzes millions of possible combinations to help provide emergency managers with solutions based on a scientific metric. This can assist in the generation of risk area around a site. It allows emergency management to focus where the risk is greatest.

Readiness Assessment is an objective process to determine readiness of protection for a site. It uses performance measures to determine if the community meets the quantitative standards and is ready and

able to protect the public. It requires community input and participation to obtain results. The process takes six to nine months to accomplish. A sample time-line for the project was presented.

Q: Is the D2-Puff model going to be submitted to State governments for certification?

A: (Answered by Mr. Myirski, SBCCOM) No. The software will be certified by the Army, as the only official use for making a protective action recommendation will be by the Army. The process will be the same as used for D2PC.

Q: How many meteorological towers are required to run the software?

A: (Answered by Mr. Myirski, SBCCOM) Only one is required, but the software is flexible enough to use many more.

# **Summary of Presentation 3:** Jacques Mitrani, Senior Technical Staff, ANL.

Any disaster response involves efforts of many different organizations. It is difficult to coordinate and integrate response planning between organizations, and even more difficult for emergency managers to get the "big picture" of overall response efforts clear in their minds.

Systems-based planning and the synchronization matrix offer a way to ensure coordination and get a handle on the overall flow of response actions and events. The basic concept was taken from military planning procedures and adapted to emergency response.

The elements of systems based planning were presented. Mr. Mitrani discussed how the planning elements tie together to form a tool, the Emergency Response Synchronization Matrix (ERSM). An ERSM may be developed in conjunction with new plans, or from existing plans. The basic benefits of the process were highlighted. The details of how the process is implemented in a CSEPP community were explained.

# Summary of Presentation 4: Dr. John Sorensen, ORNL

ORNL has developed two major planning tools for CSEPP: (1) Oak Ridge Evacuation Modeling System (OREMS), and (2) Protective Action Dosage Reduction Estimator (PADRE). PADRE integrates dispersion modeling with models of emergency response. PADRE can help compare evacuation, sheltering and respiratory protection strategies. It has potential use in exercise evaluation and risk/benefit decisions. It can be used with the systems analysis process to determine the viability of a chosen course of action. The model is being improved.

OREMS was developed in conjunction with the Department of Transportation (DOT), using current DOT traffic codes, to provide an evacuation simulation model. OREMS can help determine the need for detailed evacuation planning and assists in the development of traffic management strategies. OREMS can be used to develop comprehensive traffic and evacuation management plans.

ORNL models are based on research and analysis of existing models, including behavioral response studies. The models and tools are supported by training as well. Other tools include:

- C The Planning Wizard, which can help compare plans against guidance.
- C The Emergency Planner's Companion, which provides the underlying rationale for functional topics found in the planning guidance.
- C A list of CSEPP locations where the different planning models were used for specific problems was presented. Additionally, Dr. Sorensen informed the attendees that all of the ORNL developed planning tools will be available on the ORNL WWW site.

**Summary of Presentation 5:** Dave Millard, FEMIS Design and Development Project Manager, Pacific Northwest National Laboratory (PNNL)

FEMIS supports the planning process and is a place for storing the results of the planning process. FEMIS stores information in a database format. FEMIS can manage demographic information and emergency management information with multiple interfaces. FEMIS uses the D2PC hazard model to analyze the CSEPP hazard (and other hazards). The vulnerability assessment component of FEMIS is "all hazard" capable. The protective action model can be animated for visual effects to enhance understanding of event. FEMIS can help document the decisions made which drive the development of plans. The relational database stores the information generated in the development of plans. FEMIS provides an electronic plan of which a major component consists of the planning task lists. FEMIS also can be used to verify plans and procedures through exercises. It uses a separate database to prevent exercises from conflicting with operations.